

CLAIMS

1. An exhaust gas purifying catalyst comprising a metal oxide particle containing ceria and at least either one of alumina and silica, and a noble metal supported on said metal oxide particle,

5                   said metal oxide particle having a core where the total molar number of alumina and silica is larger than the molar number of ceria, and a surface layer where the molar number of ceria is larger than the total molar number of alumina and silica.

10                 2. The exhaust gas purifying catalyst as claimed in claim 1, wherein said metal oxide particle is formed from a solution containing a ceria sol and a sol of at least either one of alumina and silica.

15                 3. The exhaust gas purifying catalyst as claimed in claim 1 or 2, wherein said metal oxide particle has a particle size of 500 nm or less.

20                 4. The exhaust gas purifying catalyst as claimed in any one of claims 1 to 3, wherein the molar ratio of (Al+Si):Ce in the metal oxide particle is from 1:0.5 to 0.5:1.

25                 5. The exhaust gas purifying catalyst as claimed in any one of claims 1 to 4, wherein said noble metal is platinum.

6. A metal oxide particle having a core where the total molar number of alumina and silica is larger than the molar number of ceria, and a surface layer where the molar number of ceria is larger than the total molar number of alumina and silica.

30                 7. A process for producing a metal oxide particle having a core where the total molar number of alumina and silica is larger than the molar number of ceria, and a surface layer where the molar number of ceria is larger than the total molar number of alumina and silica, said process comprising:

35                          preparing a solution containing a ceria sol and a sol of at least either one of alumina and

silica,

adjusting the pH of said solution to be closer to the isoelectric point of the sol of at least either one of alumina and silica than to the isoelectric point of the ceria sol, and

5 aggregating the sol from said solution to produce an aggregate.